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Emission Summary

Permit Number: 970414P

Company Name: Continuum Murphy Fractionation Plant

Source Status: New☒ Modification☐ Expansion☐ Relocation☐ **Permit Status:** New☒ Renewal☐

PSD☐ NSPS☐ NESHAP☐ **Previous Permit Number:** Construction N/A Operating N/A

	Pounds/Hour			Tons/Year				
	Actual	**Potential**	**Allowable**	**Actual**	**Potential**	**Allowable**	**Net Change**	**Limit Applicable Standard**
PM								0.6 lb/MMBtu
Heater	0.190		7.98		0.830	34.95		TAPCR 1200-03-06-.02(2)(a)
Flare	0.562				0.284			
SO_2								
Heater	0.019				0.083	0.083		TAPCR 1200-03-14-.03(5)
Flare	0.0001				0.0003			
CO								
Heater	2.85				12.48	12.48		TAPCR 1200-03-07-.07(2)
Flare	57.10				28.55			
VOC								
Heater	0.304				1.33	1.33		TAPCR 1200-03-07-.07(2)
Flare	1.16				0.58			
Fugitive	3.97				17.36	17.36		
NO_X								
Heater	2.28				9.99	9.99		TAPCR 1200-03-07-.07(2)
Flare	12.53				6.26			
Opacity								20%
								TAPCR 1200-03-05-.01(1)
								TAPCR 1200-03-05-.03(6)

Notes:
-The flare is being used for safe combustion of any off gases
-Emissions from the flare are based on 1,000 hr/yr. Four scenarios were evaluated with worst case venting from the depropanizer.
-Fugitive emissions are from valves, flanges, connectors, and seals.

EAST PERMITTING PROGRAM
Date of Data: June 17, 2015
EPS Initials: TFR

CONSTRUCTION PERMIT SUMMARY REPORT

Company Name: Continuum Murphy Fractionation Plant **File Number:** 37-0188-01 **EPS:** TFR

Application Received: June 17, 2015 **Application Complete:** June 17, 2015

Air Quality Analysis Performed? Yes☐ No☒

Project Description:
Continuum Murphy Fractionation Plant (CMFP) proposes to fractionate natural gas liquids into ethane, propane, butane, and natural gasoline. This operation will consist of one (1) inlet separator, three (3) process units (de-ethanizer, depropanizer, and debutanizer), one (1) propane refrigeration unit, one (1) hot oil system with a hot oil heater, one (1) flare, and six (6) micro turbines to generate electrical power. Emissions are from the following sources: fugitive components (valves, flanges, connectors, seals), hot oil heater, micro turbines, and a flare. These sources will emit Particulate Matter (PM), Sulfur Dioxide (SO_2), Carbon Monoxide (CO), Volatile Organic Compounds (VOCs), and Nitrogen Oxides (NO_X). There will be physical construction.

Applicability Determination

40 CFR 60: Subpart GG - Standards Of Performance For Stationary Gas Turbines

40 CFR 60: Subpart KKKK - Standards Of Performance For Stationary Combustion Turbines

The turbines are potentially subject to the above Subparts. However, due to their heat input capacity (2.28 MMBtu/hr - each), they are not subject to either Subpart (10 MMBtu/hr).

40 CFR 60: Subpart Dc - Standards Of Performance For Small Industrial-Commercial-Institutional Steam Generating Units

The heater is not subject to this Subpart. It is used for the hot oil system, and does not meet the definition of a steam generating unit as defined in Section §60.41c of this Subpart. The hot oil heater is non-contact and heats oil which then provides heat (via heat exchangers) to the process units.

Rules Analysis

Title V ☐ Cond. Major ☐ Minor ☒ Source category listed in 1200-03-09-.01(4)(b)1.(i)? Yes☐ No☒

Reason for PSD:	New source above ____ TPY	N/A	☒	Sig. increase in ____ emissions		☐	N/A ☒
Applicable NSPS:	40 CFR Part 60, Subpart	N/A	☒	State Rule 1200-03-16-.		☐	N/A ☒
Applicable NESHAP:	40 CFR Part 61, Subpart	N/A	☒	State Rule 1200-03-11-.		☐	N/A ☒
Applicable NESHAP:	40 CFR Part 63, Subpart	N/A	☒	State Rule 1200-03-31-.		☐	N/A ☒

Other Applicable State Rules

PM Emissions:	1200-03-	06	-. 02(2)(a)	☒	N/A ☐	NO_x Emissions:	1200-03-	07	-. 07(2)	☒	N/A ☐
SO_2 Emissions:	1200-03-	14	-. 03(5)	☒	N/A ☐	Lead Emissions:	1200-03-		-.	☐	N/A ☐
CO Emissions:	1200-03-	07	-. 07(2)	☒	N/A ☐	_____ Emissions:	1200-03-		-.	☐	N/A ☐
VOC Emissions:	1200-03-	07	-. 07(2)	☒	N/A ☐	____ Emissions:	1200-03-		-.	☐	N/A ☐

Visible Emissions from Source 01 not to exceed 20 % opacity per Method 9 1200-03- 05- .03(6)
1200-03- 05- .01(1)

Insignificant/Exempt Sources

There are six (6) 0.2 megawatt gas fired turbines that the facility proposes to install to generate electrical power. These sources will constitute an *insignificant activity* or *insignificant emissions unit*, as defined in part 1200-03-09-.04(2)(a)3. of the Tennessee Air Pollution Control Regulations. The proposed turbines would result in potential emissions from the source of less than five (5) tons per year of each air contaminant and each regulated air pollutant that is not a hazardous air pollutant, and less than 1,000 pounds per year of each hazardous air pollutant.